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achieve a destruction and removal efficiency (DRE) of 99.99% for each principal organic hazardous constituent (POHC) designated (under §264.342) in its permit for each waste feed. DRE is determined for each POHC from the following equation:

$$DRE = \frac{\left(W_{in} - W_{out}\right)}{W_{in}} \times 100\%$$

where:

W_{in}=mass feed rate of one principal organic hazardous constituent (POHC) in the waste stream feeding the incinerator

a.nd

W_{out}=mass emission rate of the same POHC present in exhaust emissions prior to release to the atmosphere.

- (2) An incinerator burning hazardous wastes FO20, FO21, FO22, FO23, FO26, or FO27 must achieve a destruction and removal efficiency (DRE) of 99.9999% for each principal organic hazardous constituent (POHC) designated (under §264.342) in its permit. This performance must be demonstrated on POHCs that are more difficult to incinerate tetra-, penta-, hexachlorodibenzo-p-dioxins and dibenzofurans. DRE is determined for each POHC from the equation in §264.343(a)(1).
- (b) An incinerator burning hazardous waste and producing stack emissions of more than 1.8 kilograms per hour (4 pounds per hour) of hydrogen chloride (HCl) must control HCl emissions such that the rate of emission is no greater than the larger of either 1.8 kilograms per hour or 1% of the HCl in the stack gas prior to entering any pollution control equipment.
- (c) An incinerator burning hazardous waste must not emit particulate matter in excess of 180 milligrams per dry standard cubic meter (0.08 grains per dry standard cubic foot) when corrected for the amount of oxygen in the stack gas according to the formula:

$$P_c = P_m \times \frac{14}{21 - Y}$$

Where P_c is the corrected concentration of particulate matter, P_m is the measured concentration of particulate matter, and Y is the measured concentration of oxygen in the stack gas, using the Orsat method for oxygen analysis of dry flue gas, presented

in part 60, appendix A (Method 3), of this chapter. This correction procedure is to be used by all hazardous waste incinerators except those operating under conditions of oxygen enrichment. For these facilities, the Regional Administrator will select an appropriate correction procedure, to be specified in the facility permit.

(d) For purposes of permit enforcement, compliance with the operating requirements specified in the permit (under §264.345) will be regarded as compliance with this section. However, evidence that compliance with those permit conditions is insufficient to ensure compliance with the performance requirements of this section may be "information" justifying modification, revocation, or reissuance of a permit under §270.41 of this chapter.

[46 FR 7678, Jan. 23, 1981, as amended at 47 FR 27532, June 24, 1982; 48 FR 14295, Apr. 1, 1983; 50 FR 2005, Jan. 14, 1985; 71 FR 16906, Apr. 4, 2006]

§ 264.344 Hazardous waste incinerator permits.

- (a) The owner or operator of a hazardous waste incinerator may burn only wastes specified in his permit and only under operating conditions specified for those wastes under § 264.345, except:
- (1) In approved trial burns under §270.62 of this chapter; or
- (2) Under exemptions created by §264.340.
- (b) Other hazardous wastes may be burned only after operating conditions have been specified in a new permit or a permit modification as applicable. Operating requirements for new wastes may be based on either trial burn results or alternative data included with part B of a permit application under § 270.19 of this chapter.
- (c) The permit for a new hazardous waste incinerator must establish appropriate conditions for each of the applicable requirements of this subpart, including but not limited to allowable waste feeds and operating conditions necessary to meet the requirements of § 264.345, sufficient to comply with the following standards:
- (1) For the period beginning with initial introduction of hazardous waste to the incinerator and ending with initiation of the trial burn, and only for the minimum time required to establish

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operating conditions required in paragraph (c)(2) of this section, not to exceed a duration of 720 hours operating time for treatment of hazardous waste, the operating requirements must be those most likely to ensure compliance with the performance standards of §264.343, based on the Regional Administrator's engineering judgment. The Regional Administrator may extend the duration of this period once for up to 720 additional hours when good cause for the extension is demonstrated by the applicant.

- (2) For the duration of the trial burn, the operating requirements must be sufficient to demonstrate compliance with the performance standards of §264.343 and must be in accordance with the approved trial burn plan:
- (3) For the period immediately following completion of the trial burn, and only for the minimum period sufficient to allow sample analysis, data computation, and submission of the trial burn results by the applicant, and review of the trial burn results and modification of the facility permit by the Regional Administrator, the operating requirements must be those most likely to ensure compliance with the performance standards of §264.343, based on the Regional Administrator's engineering judgement.
- (4) For the remaining duration of the permit, the operating requirements must be those demonstrated, in a trial burn or by alternative data specified in \$270.19(c) of this chapter, as sufficient to ensure compliance with the performance standards of \$264.343.

 $[46\ {\rm FR}\ 7678,\ {\rm Jan}.\ 23,\ 1981,\ {\rm as\ amended\ at\ }47\ {\rm FR}\ 27532,\ {\rm June\ }24,\ 1982;\ 48\ {\rm FR}\ 14295,\ {\rm Apr.\ }1,\ 1983;\ 50\ {\rm FR}\ 4514,\ {\rm Jan}.\ 31,\ 1985;\ 71\ {\rm FR}\ 40273,\ {\rm July\ }14,\ 2006]$

§ 264.345 Operating requirements.

- (a) An incinerator must be operated in accordance with operating requirements specified in the permit. These will be specified on a case-by-case basis as those demonstrated (in a trial burn or in alternative data as specified in §264.344(b) and included with part B of a facility's permit application) to be sufficient to comply with the performance standards of §264.343.
- (b) Each set of operating requirements will specify the composition of

the waste feed (including acceptable variations in the physical or chemical properties of the waste feed which will not affect compliance with the performance requirement of §264.343) to which the operating requirements apply. For each such waste feed, the permit will specify acceptable operating limits including the following conditions:

- (1) Carbon monoxide (CO) level in the stack exhaust gas;
 - (2) Waste feed rate:
 - (3) Combustion temperature;
- (4) An appropriate indicator of combustion gas velocity;
- (5) Allowable variations in incinerator system design or operating procedures: and
- (6) Such other operating requirements as are necessary to ensure that the performance standards of §264.343 are met.
- (c) During start-up and shut-down of an incinerator, hazardous waste (except wastes exempted in accordance with §264.340) must not be fed into the incinerator unless the incinerator is operating within the conditions of operation (temperature, air feed rate, etc.) specified in the permit.
- (d) Fugitive emissions from the combustion zone must be controlled by:
- (1) Keeping the combustion zone totally sealed against fugitive emissions; or
- (2) Maintaining a combustion zone pressure lower than atmospheric pressure: or
- (3) An alternate means of control demonstrated (with part B of the permit application) to provide fugitive emissions control equivalent to maintenance of combustion zone pressure lower than atmospheric pressure.
- (e) An incinerator must be operated with a functioning system to automatically cut off waste feed to the incinerator when operating conditions deviate from limits established under paragraph (a) of this section.
- (f) An incinerator must cease operation when changes in waste feed, incinerator design, or operating conditions exceed limits designated in its permit.

[46 FR 7678, Jan. 23, 1981, as amended at 47 FR 27532, June 24, 1982; 50 FR 4514, Jan. 31, 1995]